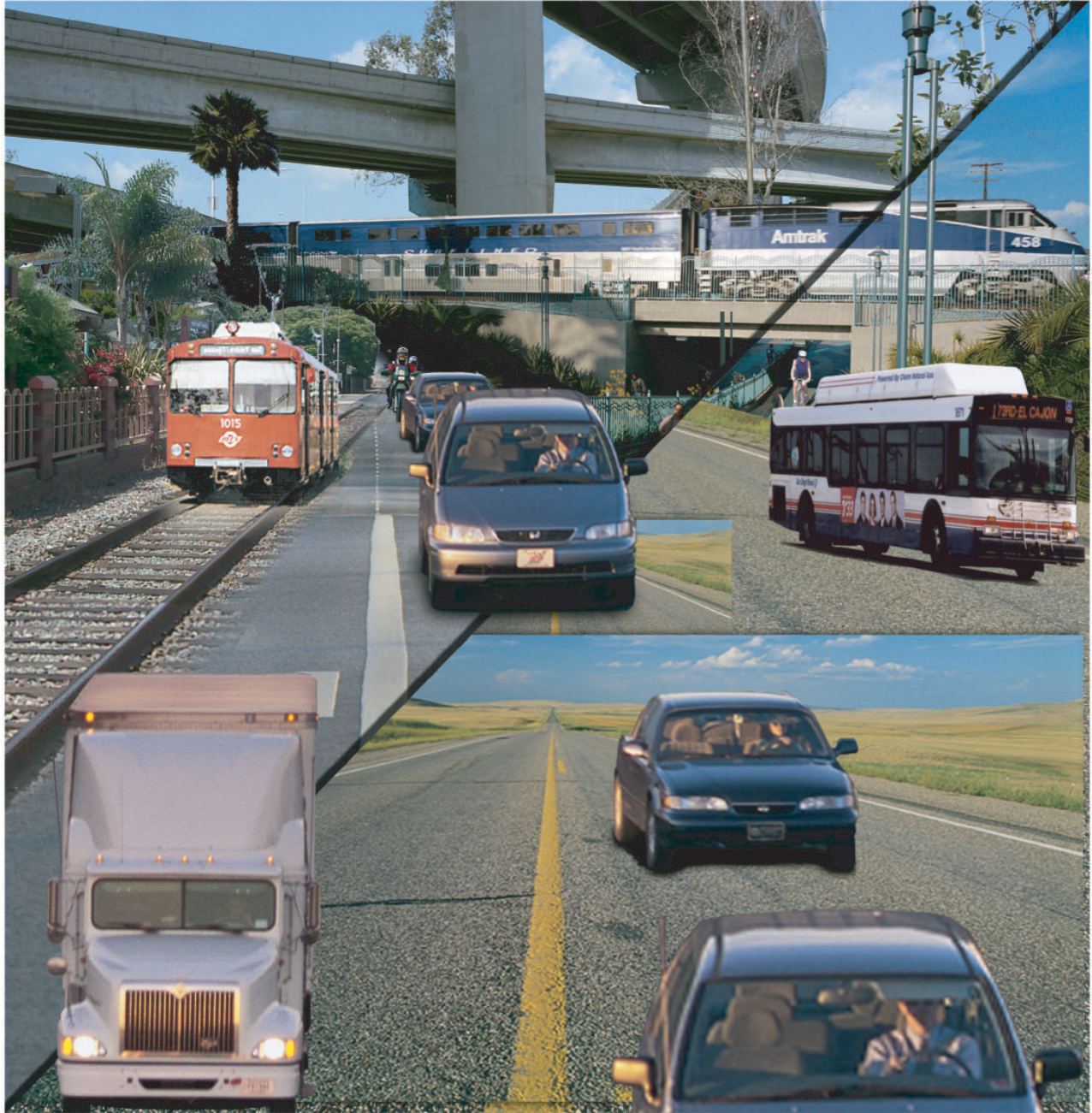


T C R



2003

TRANSPORTATION CONCEPT REPORT



DISTRICT 11 Planning Division
California Department of Transportation



This page intentionally left blank.

STATE ROUTE 163 AREA MAP



SR-163 LOCATION MAP



SUMMARY	1
Existing Facility and 2020 Transportation Concept	1
INTRODUCTION	3
Introduction and Statement of Planning Intent	3
ROUTE DESCRIPTION	4
Purpose of Route	4
Existing Facility Classifications	4
Existing Facility	5
SOCIO-ECONOMICS	7
Corridor Growth and Demographics	7
Regional Growth Management Strategy	8
Community Planning	8
FUTURE TRANSPORTATION CONCEPT (2020)	11
CONCEPT RATIONALE	12
Highway Component	12
Transit Component	13
System Management and Travel Reduction Component	14
Maintenance Component	16
Goods Movement Component	16
Aviation Component	16
Non-Motorized Component	17
Tourism Component	17
AIR QUALITY	18
Air Quality Conditions	18
INTELLIGENT TRANSPORTATION SYSTEMS (ITS)	19
CONCLUSION	20
2020 Transportation Concept Facility Improvements	20
Post-2020 Ultimate Transportation Corridor	20
SYSTEM PLANNING ACRONYMS	21
SIGNATURES	23
LIST OF TABLES	
TABLE S-1 Existing Facility and 2020 Transportation Concept	1
TABLE S-2 2020 Transportation Concept Facility Improvements	2
TABLE S-3 Comparison with SANDAG 2030 Mobility Plan	2
TABLE 1 Existing Facility Geometrics	5
TABLE 2 Existing Auxiliary Lanes	6
TABLE 3 Selected Arterial Streets	6
TABLE 4 Jurisdictional Population Growth	7
TABLE 5 Population, Housing, and Employment Growth	7
TABLE 6 SR- 163 CMP Information	10
TABLE 7 Ten-Year SHOPP Projects	13
TABLE 8 2020 Transportation Concept Facility Improvements	20

This page intentionally left blank.

Existing Facility and 2020 Transportation Concept

Table S-1 shows the existing facility and operating conditions for SR-163, as well as the specific 2020 Transportation Concept facility type and projected Level of Service.

2020 Concept LOS

TABLE S-1

EXISTING FACILITY AND 2020 TRANSPORTATION CONCEPT

Segment/County/ Post Mile	Location	# of Lanes Facility Type	ADT		Peak Hour V/C Ratio		Operating LOS		
			2000	2020	2000	2020	2000	2020	
1) SD 0.6-0.9	Ash Street/Russ Boulevard to I-5	4F	56,700	70,500	0.70	0.73	D	D	F0
2) SD 0.9-2.7	I-5 to Washington Street	4F	101,400	115,300	1.12	1.20	F0	F0	F0
3) SD 2.7-3.7	Washington Street to I-8	6F+Aux	170,500	209,700	0.91	1.15	D	F0	F0
4) SD 3.7-7.0	I-8 to I-805	8F	186,400	216,400	0.87	1.02	D	F0	E
5) SD 7.0-9.6	I-805 to SR-52	8F	179,800	195,600	0.82	0.94	D	E	E
6) SD 9.6-R11.7	SR-52 to I-15	8F	162,900	175,100	0.73	0.90	C	D	E

4F/6F/8F = 4,6,8 Lane Freeway

ADT = Average Daily Traffic

Aux = Auxiliary Lane

V/C = Volume to Capacity

LOS = Level of Service

NOTE: ADT's are from the San Diego Association of Governments' 2020 Cities/Counties Forecast Smart Growth Preferred Plan (September, 2001). Peak Hour V/C Ratios and Peak Hour Operating LOS bases are only intended as a general planning guideline. Results may differ based on usage of other traffic analysis methodologies.

Table S-2 shows highway facility improvements for SR-163.

TABLE S-2

2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Segment/ County/ Post Mile	Location	Improvement Description	Peak Hour Operating LOS	Concept LOS*
2-3) SD 0.9-3.7	I-5 to I-8	Construct operational improvements	F0	F0
4) SD 4.4	Friars Rd/SR-163	Construct new southbound SR-163 off ramp and interchange improvements**	F0	F0
5) SD 9.1	Clairemont Mesa Boulevard/SR-163	Reconstruct interchange	E	F0
6) SD R10.8	Kearny Villa Road/SR-163	Construct northbound HOV bypass lane on ramp	D	E

LOS = Level of Service

*Concept LOS is based on the SANDAG CMP minimum LOS standard.

** City of San Diego project

The SANDAG 2030 Mobility Plan lists improvements for State highway routes. It includes a Revenue Constrained Plan, a Mobility Network Plan, and an Unconstrained Revenue Plan. Table S-3 provides a comparison of the TCR improvements with the SANDAG 2030 Mobility Plan.

TABLE S-3

COMPARISON WITH SANDAG 2030 MOBILITY PLAN

Segment	Location	Improvement Description	In SANDAG 2030 Revenue Constrained Plan?	In SANDAG 2030 Mobility Network Plan?	In SANDAG Unconstrained Revenue Plan?
1) SD 0.6-0.9	Ash Street/ Russ Boulevard to I-5	-	-	-	-
2) SD 0.9-2.7	I-5 to Washington Street	Construct Operational Improvements	Yes	Yes	Yes
3) SD 2.7-3.7	Washington Street to I-8	Construct Operational Improvements	Yes	Yes	Yes
4) SD 3.7-7.0	I-8 to I-805	Construct new southbound SR-163 offramp and interchange improvements	Yes	Yes	Yes
5) SD 7.0-9.6	I-805 to SR-52	Reconstruct Interchange	Yes	Yes	Yes
6) SD 9.6-R11.7	SR-52 to I-15	Construct Northbound HOV Bypass Lane On Ramp	Yes	Yes	Yes

Introduction and Statement of Planning Intent

This Transportation Concept Report (TCR) is a planning document which describes the Department’s basic approach to the development of a given highway corridor. Considering financial constraints and projected travel demand, this TCR establishes a twenty year transportation planning concept for State Route 163 (SR-163) and identifies modal transportation options needed to achieve the concept. The concept includes operating Levels of Service (LOS), modal improvements, and new technologies. The TCR also considers potential long-term needs for the corridor beyond the twenty year planning period. The long term needs focus on the Post-2020 Ultimate Transportation Corridor (UTC).

The TCR is a preliminary planning document that leads to subsequent programming and the project development process. The specific proposed nature of improvements (i.e., number of lanes, access control, etc.) may change in later project

development stages, with final determinations made during the Project Study Report (PSR), Project Report (PR), or design phases.

Each TCR must be viewed as an integral part of a planned system. The TCR is based on the completion of the 20 year system. The system has been developed to meet anticipated travel demand generated from regional growth forecasts. Removal of any portion of a route from the system could adversely affect travel on parallel or intersecting routes.

The TCR is prepared by Caltrans District 11 staff in cooperation with local and regional agencies. The TCR is updated as necessary as conditions change or new information is obtained.

The focus of the TCR is the 2020 Transportation Concept, which includes State highway, transit, system management and travel reduction, maintenance, goods movement, aviation, nonmotorized, and tourism components.

LEVEL OF SERVICE (LOS) DEFINITIONS			
LOS	V/C	Congestion Delay	Traffic Description
(Used for two and four lane freeways and expressways)			
C	0.46 - 0.65	None to Minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
D	0.70-0.92	Minimal to Significant	Approaches unstable flow, heavy volumes, very limited freedom to maneuver
E	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
(Used for six lane freeways and expressways)			
D	0.75-0.92	Minimal to Substantial	Approaches unstable flow, heavy volumes,very limited freedom to maneuver.
E	0.93-1.00	Substantial	Extremely unstable flow, maneuverability extremely poor.
(Used for freeways and expressways)			
F0	1.01-1.25	Considerable 0-1 hour delay	Forced flow, heavy congestion, long queues form behind breakdown, stop and go points, longer stop periods.

LOS is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. An LOS definition generally describes these conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety.

Route Description

SR-163 is one of the principal north/south freeways serving the inland portion of the greater San Diego metropolitan area. The southern terminus of SR-163 is at the Central Business District (CBD) and I-5. The route extends north 11.7 miles to its northern terminus at the I-15 junction.

SR-163 was added to the State highway system in 1931. In 1959, it was added to the Freeway and Expressway System.

Three State highways intersect SR-163 within District 11. They are I-5, I-8, and SR-52. SR-163 also parallels I-15 and I-805 as well as I-5.

Purpose of Route

SR-163 serves intraregional travel by linking the CBD with the adjacent and surrounding communities. SR-163 acts as a direct link from the CBD to the primarily residential communities of Tierrasanta, Mira Mesa, and Scripps Ranch in the I-15 corridor, as well as the major employment centers located in the Kearny Mesa and Miramar areas. The southern terminus of the reversible High Occupancy Vehicle (HOV) lanes on I-15 joins with SR-163, further attracting commuters traveling to and from the CBD.

Existing Facility Classifications

The length of SR-163 is divided into two functional classifications. Segment 1 (Post Mile (PM) 0.6-0.9) is classified as Minor Arterial. The remaining five segments (PM 0.9-R11.7) are classified as Principal Arterial, Other Freeways and Expressways.

A portion of the route (P.M. 0.6-3.8) is eligible to be part of the California Scenic Highway System. Within that portion, one section (P.M. 0.9-2.2) is an officially designated segment. The Federal Highway Administration (FHWA) has designated the three segments between I-8 and I-15 as part of the National Network, available to larger trucks, based on the Surface Transportation Assistance Act (STAA). The same three segments are part of the International Border Trade Corridors (IBTC) system. Additionally, the portion of SR-163 from just south of the Cabrillo Bridge to just south of the Sixth Avenue onramp undercrossing is within the Cabrillo National/California Register Historic District.

For maintenance programming purposes, the State Highway System has been divided into Class 1, 2, and 3 highways based on the Maintenance Service Level (MSL) descriptive definitions. SR-163 is classified as MSL 2 from Ash/A Street (P.M. 0.6) to I-805 (P.M. 7.0), and as MSL 1 from I-805 (P.M. 7.0) to I-15 (P.M. R11.7).



Existing Facility

In Segment 1, SR-163 is a four lane freeway. Segment 1 includes an exclusive northbound bus lane. This lane allows buses to bypass the queue of vehicles on the collector southerly of the beginning of the freeway. Segment 2 is a four lane freeway. Segment 3 is a six lane freeway with two auxiliary lanes. The remainder of the route is an eight lane freeway.

A physical description of the existing facility geometrics in a segment-specific format is shown in Table 1.

Auxiliary Lanes-The approximate location, direction and number of existing auxiliary lanes and connectors on SR-163 are shown in Table 2. Auxiliary lanes can enhance traffic flow on the freeways by providing supplemental localized capacity for motorists entering and exiting at freeway ramps.

Ramp Meters-Currently there are eight ramp meters on the route, three on the northbound side and five on the southbound side. The northbound ramp meters are at Balboa Avenue (PM 8.04), Clairemont Mesa Boulevard

(PM 8.84) and Kearny Villa Road (PM10.82). The southbound ramp meters are located at Washington Street (PM 2.84), Balboa Avenue/Mercury Street (PM7.83 and PM 8.03), Clairemont Mesa Boulevard (PM 8.81) and Kearny Villa Road (PM 10.84).

Arterial Streets-There are arterial streets that parallel or intersect SR-163 that could provide alternative routes for commuters wishing to avoid peak hour congestion on the State highway. Listed in Table 3 are the major arterials along the corridor that parallel or intersect SR-163.

Park and Ride- No Park and Ride facilities are available along SR-163.

Bus Service- San Diego Transit and San Diego County Transit currently provide service on eleven express and seven local bus routes between downtown San Diego and the communities along SR-163, and to the inland areas in the northern part of the county. Buses on ten of the eleven express routes travel the entire length of the facility to and from downtown San Diego and the cities and communities of Escondido, Mira Mesa, Poway, Kearny Mesa, Rancho Bernardo and

EXISTING FACILITY GEOMETRICS

TABLE 1

Segment/County Post Mile	# of Lanes	Lane Width	Outside Shoulder Width	Inside Shoulder Width	Max. R/W Width	Median Width	Grade Line
1) SD 0.6-0.9	4F	3.7 (12)	2.4 (8)	2.1 (7)	60.9 (200)	6.7-30.1 (22-99)	F
2) SD 0.9-2.7	4F	3.7 (12)	>2.4 (8)	1.5-1.8 (5-6)	60.9 (200)	3.6-16.4 (12-54)	F
3) SD 2.7-3.7	4F/6F/ 7F/8F/9F	3.7 (12)	0.6-2.7 (2-9)	0.0-0.6 (0-2)	60.9 (200)	1.8-5.7 (6-19)	F
4) SD 3.7-7.0	5F/6F/7F/ 8F/9F/11F	3.7 (12)	2.4-3.0 (8-10)	0.6-2.4 (2-8)	60.9 (200)	5.7-9.1 (19-30)	F & R
5) SD 7.0-9.6	8F/9F/10F	3.7 (12)	2.4-3.0 (8-10)	2.4-4.2 (8-14)	60.9 (200)	7.6-9.1 (25-30)	F
6) SD 9.6-R11.7	8F/9F	3.7 (12)	3.0 (10)	2.4(8)	60.9 (200)	9.1-30.1 (30-99)	F

Outside shoulder 0.3 meter (1 ft.) – 3.0 meter (10 ft.)
Inside shoulder 0.0 meter –6.1 meter (20 ft.)

R/W= Right of Way
F= Freeway

Grade Line Designations
R= Rolling
F= Flat

NOTE: Widths are in meters (feet in parentheses)

Rancho Penasquitos. The other express bus serves Tierrasanta and downtown San Diego going as far north as Clairemont Mesa Boulevard. on the route.

Service is provided to and from the areas of La Mesa, El Cajon, La Jolla, Mission Valley, Serra Mesa, Clairemont and downtown San Diego on the seven local routes.

Bikeways- Crossing the SR-163 corridor is a discontinuous bike path in Mission Valley (San Diego River bike path), bike lanes at Friars Road, bike routes at El Prado, Clairemont Mesa Blvd. and Aero Dr., and lanes at Mesa College Dr. and Kearny Villa Rd.

TABLE 2

EXISTING AUXILIARY LANES

Segment/County/ Post Mile	Location	Direction	Number
1) SD 2.7	Washington Street	Northbound	1
2) SD 2.9	Washington Street	Southbound	1
3) SD 3.0 - 3.7	6th Avenue to Camino Del Rio South	Northbound	1
4) SD 3.0 - 3.7	6th Avenue to Camino Del Rio South	Southbound	2
5) SD 3.7 - 3.7	Camino Del Rio South to I-8	Northbound	1
6) SD 3.7 - 3.9	I-8 to Camino de la Reina	Northbound	3*
7) SD 3.7 - 3.9	I-8 to Camino de la Reina	Southbound	2
8) SD 3.9 - 4.4	Camino de la Reina to Friars Road	Northbound	3*
9) SD 3.9 - 4.4	Camino de la Reina to Friars Road	Southbound	2
10) SD 5.8 - 6.5	Genesee Avenue to Mesa College Drive	Northbound	1
11) SD 5.8 - 6.5	Genesee Avenue to Mesa College Drive	Southbound	1
12) SD 6.9 - 7.2	I-805 to Aero Drive	Southbound	1
13) SD 7.2 - 8.0	Aero Drive to Balboa Avenue	Northbound	2
14) SD 7.2 - 8.0	Aero Drive to Balboa Avenue	Southbound	1
15) SD 8.0 - 8.8	Balboa Avenue to Clairemont Mesa Blvd.	Northbound	1**
16) SD 8.0 - 8.8	Balboa Avenue to Clairemont Mesa Blvd.	Southbound	1
17) SD 8.8 - 9.5	Clairemont Mesa Boulevard to SR-52	Northbound	1
18) SD 8.8 - 9.5	Clairemont Mesa Boulevard to SR-52	Southbound	1
19) SD R10.8 - 11.1	Kearny Villa Road to the HOV offramp	Southbound	1

* Includes two connector lanes.

** Connector lane only.

TABLE 3

SELECTED ARTERIAL STREETS

Segment	Arterial	Boundaries
1-2)	Sixth Avenue	I-5 to Washington Street
1-2)	Park Boulevard	Imperial Avenue to Adams Avenue
2-3)	Ulric Street/Linda Vista Road/Convoy Street	Friars Road to SR-52
4-5)	Kearny Villa Road	I-805 to Junction I-15

Socio-Economics

This section includes land use/corridor growth analysis and demographic analyses for existing and future conditions in this corridor.

Corridor Growth and Demographics

The SANDAG Series 9 Regional Population and Employment Forecast anticipates a population growth change in the San Diego region from 2.66 million people in 1995 to 3.85 million people in 2020. This represents a 44.4 percent increase in population. Series 9 also projects the housing stock in the San Diego region will increase from 996,684 units in 1995 to 1.4 million units in 2020, a 40.9 percent change. The total labor force is also expected to grow from 1.19 million workers in 1995 to 1.7 million workers in 2020, for an increase of 45.1 percent. These growth changes will create a demand for additional public facilities. Complementary land use and transportation improvements will be required to accommodate forecasted growth, and to provide the additional public facilities.

Table 4 shows current population, the 2020 projected population estimate, and the resultant growth rate for the City of San Diego.

Table 5 shows demographic characteristics for the appropriate subregional area.

SR-163 traverses the mostly built-out inland corridor between downtown and North County. The land use along this corridor consists of a variable mix of industrial, office buildings, shopping centers, and single and multiple unit residential developments. The Mission Valley area of the corridor consists of a high density development mix of shopping centers, regional employment, education centers, and multiple unit residential developments. The Mission Valley area is currently undergoing extensive land use modification. The first San Diego River Improvement Project will protect the Mission Valley area from future river flooding and allow for additional high density development. Population and employment growth in the Mission Valley area is expected to grow at a rate greater than the regional average. The employment growth for the Marine Corps Air Station (MCAS) Miramar is also expected to grow at a rate greater than the regional average. The expansion of facilities and personnel, due to the recent closures of near-by facilities, will increase MCAS Miramar military personnel as well as civilian support. MCAS Miramar and the immediate surrounding area will grow further as a major employment center. Additional traffic generators in Mission Valley and the Miramar area will significantly increase congestion on area surface streets, freeway interchanges, and the freeway itself.

TABLE 4 JURISDICTIONAL POPULATION GROWTH

Jurisdiction	1995	2020	% Change
San Diego	1,174,422	1,693,533	44%

Source: SANDAG 2020 Cities/County Forecast Profiles (February 1999)

**TABLE 5 POPULATION, HOUSING AND EMPLOYMENT GROWTH
CITY OF SAN DIEGO**

Year	Total Population	% Change from Base Year	Total Housing Units	% Change from Base Year	Total Employment Year	% Change From Base Year
1995	1,174,422	NA	435,515	NA	645,159	NA
2005	1,403,874	19%	518,784	14%	780,148	20%
2010	1,449,437	27%	559,327	23%	801,216	24%
2020	1,693,533	44%	631,237	39%	869,977	35%

Source: SANDAG 2020 Cities/County Forecast Profiles; Subregional Areas 10, 11, 12, 16, 17, 35

Another methodology to ensure compatibility between land use and the statewide transportation system is the Department's Intergovernmental Review process. Potential development projects are reviewed to determine what impacts they may have on State transportation facilities. Impacts can include level of service changes, right of way protection issues, operations and/or maintenance issues, or growth inducing/ cumulative impacts. Intergovernmental Review also analyzes proposed developments to ensure consistency with regional and state transportation planning documents.

The Intergovernmental Review (IGR) database shows that there may be some development projects in the future along the route. In particular, the area just east of SR-163 between Balboa Avenue and Clairemont Mesa Boulevard will be redeveloped by the City of San Diego under the San Diego Spectrum Master Plan Amendment. The redevelopment will consist of a mixture, of residential, commercial and light industrial uses. Traffic generated from this development may have an impact on SR-163 as well as on the local circulation system in the vicinity of the project.

Regional Growth Management

Concurrent with the release of SANDAG's 2020 Forecast in 1999, the REGION2020 Growth Management Strategy was developed and launched. The Strategy was a first step toward informing elected officials and the general public about growth issues in general and illustrating specific ways that the region could grow in a smarter, more sustainable manner. REGION2020 was never intended to be a one-size-fits-all approach to growth management. Instead, it was recognized that different jurisdictions, and different communities within the jurisdictions, have different needs and priorities.

However, the land use plans and policies within the individual jurisdictions do have a cumulative impact on the region as a whole. REGION2020 is now evolving into the Regional Comprehensive Plan (RCP), which will build upon the Strategy's smart growth goals and principles. It will serve as the framework for strengthening the relationship among: local plans and policies and regional plans

and policies; and land use and transportation plans and policies. For example, it can help reconcile differences between local plans and regional forecasts, and can provide incentives and other mechanisms to promote transportation networks and designs that enhance local communities. The RCP will result in:

- More competitive transportation choices and reducing the region's dependency on the car,
- More compact, walkable, mixed-use development in existing communities,
- Greater housing supply,
- A more protected environment

Once completed, the RCP can serve as a guide to establish regional priorities, limit urban sprawl, address infrastructure shortfalls, and connect the transportation system. The results will enable the jurisdictions, as well as the region, to proactively plan for change. The RCP will provide the structure for connecting the local land use plans and transportation investments.

Community Planning

Community Planning is an integral part of the 2020 Transportation Concept. With California's burgeoning population, new paradigms for community development, and new ways to plan and provide transportation infrastructure and services, must be crafted. These tools will enhance effective management of California's transportation system in the coming decades and provide cost-effective infrastructure improvements that promote livable communities.

The purpose of Community planning is to integrate land use, transportation, and community values. Community planning within Caltrans has several broad goals, which include: 1) compiling and sharing information regarding community based planning, 2) Building and strengthening partnerships to facilitate community based transportation planning approaches at local, regional, and state levels, 3) enhancing the integration of community based planning approaches in the Department's culture and processes, and 4) providing training, knowledge and tools that facilitate community based planning.

Effective Community Planning allows for the creation of transportation projects that enjoy public support and are easier to develop and deliver because of consistency with community values.

Within the Department, the Office of Community Planning includes three functional groups; Intergovernmental Review (IGR)/California Environmental Quality Act (CEQA), Community Based Transportation Planning (CBTP), and Public Participation (PP). These groups share a common theme of linking land use decision-making with transportation planning.

There are six Community Planning Groups adjacent to the SR-163 corridor. They are Balboa Park, Uptown, Mission Valley, Linda Vista, Kearny Mesa and the Miramar Air Station Community Planning Groups.

CONGESTION MANAGEMENT PLAN (CMP)



State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and biennially update a Congestion Management Plan (CMP). The purposes of the CMP are to monitor the performance of the transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG, as the designated Congestion Management Agency (CMA) for the San Diego region, is responsible for developing, adopting and updating the CMP. SANDAG, local jurisdictions, and transportation operators, including the Department, are then responsible for implementing the CMP.

The original CMP for the San Diego region was adopted by the SANDAG Board of Directors in 1991 and has been updated periodically as an element of the Regional Transportation Plan (RTP). An update to the CMP is required every two years. The SANDAG Board adopted the 2002 CMP Update in March 2003.

Under CMP requirements, San Diego County freeways and state highways are monitored regularly. Whenever a roadway segment on the CMP system exceeds the CMP Level of Service (LOS) standard of E, it is designated as a "deficient segment" in the CMP after allowing for certain statutory exclusions.

SR-163 was monitored according to CMP procedures. As can be seen in the table below, the segment from Ash Street to I-8 is classified as LOS F. It exceeds the minimum CMP LOS standard of

E, and is deemed to be a "deficient segment."

Normally, a finding of LOS F triggers the need to develop a Deficiency Plan that will establish an implementation program to improve the level of service. As a minimum, Deficiency Plans must contain:

1. An analysis of the cause and source of the deficiency;
2. A list of improvements and their estimated costs needed to maintain the minimum LOS standard;
3. A list of improvements, programs, or actions and their costs that will improve multimodal performance and air quality; and
4. An Action Plan containing implementation strategies for the recommended improvements to improve current and future CMP system performance.

In this instance, the deficient segment is contained within the boundaries of the Central 1-5 Study that SANDAG completed in December 2002. The Supplemental Environmental Impact Report (SEIR) for the San Diego Ballpark Project triggered the need to prepare a Freeway Deficiency Plan (FDP) as a mitigation requirement. The Deficiency Plan became an element of the Work Program established for the Central 1-5 Corridor Study.

The City of San Diego, as the responsible local agency, will ultimately be required to formally adopt the Deficiency Plan. Various agencies will share the responsibility of implementing the Action Plan, as appropriate.

TABLE 6**SR-163 CMP INFORMATION**

Facility	From	To	Length	LOS	LOS Analysis Type
SR- 163	Ash St.	I-8	3.16	F	Freeway
SR- 163	I-8	I-15	7.83	E	Freeway

Future Transportation Concept (2020)

The 2020 Transportation Concept is comprised of the facility type, the number of lanes, average daily traffic, peak hour Volume to Capacity (V/C) Ratio, the peak hour Operating Level of Service (LOS), and the Transportation Concept LOS. The 2020 traffic projections for SR-163 are based on the San Diego Association of Government's (SANDAG) 2020 Cities/Counties Regional SMART Growth Preferred Plan Forecast (September 2001) and assume completion of the future regional transportation system. The 2020 traffic projections are subject to change based on periodic traffic

forecasting model adjustments and ongoing supplemental transportation studies.

The 2020 Transportation Concept LOS is based on the 1999 Congestion Management Plan (CMP) Update in the SANDAG 2020 Regional Transportation Plan (April, 2000). The 2020 Transportation Concept for SR-163 is LOS F0 for Segments 1, 2 and 3, and LOS E for Segments 4, 5 and 6. The 2020 Transportation Concept is shown in Table S-1 in the summary of this report.

Concept Rationale

An intermodal approach is necessary in order to provide for the projected increased person-trips in the SR-163 corridor. The concept rationale for SR-163 is based on the route's primary purpose, which is to provide additional north-south mobility for San Diego and the inland North County communities.

Highway Component

The 2020 Transportation Concept for State Route 163 includes a variety of improvements.

It will be difficult for future traffic to be adequately served by this quasi-historical route through Balboa Park. Capacity improvements within the Balboa Park area are problematic, however, operational improvements on SR-163 in the Balboa Park area from near downtown to south of I-8 are currently being studied. Specifically, the Department is currently preparing a Draft Environmental Impact Report for the Corridor Management Plan on SR-163 between "A" Street (PM 0.9) and the Sixth Avenue Southbound On Ramp (PM 3.7). Proposed project elements of this document include construct median barrier, restore median landscaping, replace irrigation system, replace and upgrade traffic signage, rehabilitate the Robinson Avenue retaining wall, introduce slope paving (seven locations), modify gore paving (21 locations), construct maintenance vehicle pull-outs (six locations), repair paving and abandoned ramps (three locations) and rehabilitate the maintenance access path.

The Central I-5 Corridor Study (Draft Final, November 2002) prepared by the consulting firm of URS/BRW in conjunction with SANDAG and Caltrans has been developed to include a package of short and long range actions to reduce traffic congestion on freeways, interchanges and arterials that provide regional access to Centre City San Diego and other key activity centers. Some of the recommended improvements will affect SR-163.

The report proposes widening I-5 from I-15 to Sea World Drive to ten lanes.

It also proposes the development of a North Centre City Collector-Distributor System. The southbound improvements include the provision

of a slip ramp from the southbound SR-163 connector to the Collector-Distributor and a slip ramp from the southbound SR-163 connector to the Pershing Drive exit ramp.

The northbound improvements include relocating the northbound SR-163 connector 0.5 mile to the south and provide access to the Collector-Distributor, and to provide a northbound SR-163 connection from the Collector-Distributor.

Additional improvements included in the Central I-5 Corridor Study may also affect SR-163. Further studies may be needed to determine the traffic impacts from the new downtown San Diego ballpark currently under construction.

North of I-8, the City of San Diego has developed a Regional Arterial System Project for improvements to the SR-163/Friars Road interchange area. The project will include restriping of the Friars Road overcrossing, widening Friars Road east of the overcrossing, and constructing a new southbound 163 ramp which will connect to Ulric Street.

A locally funded project has been developed to reconstruct the Clairemont Mesa Boulevard/SR-163 interchange. A draft Combined PSR/PR has been developed by Kimley-Horn and Associates(May 2003). The recommendations include constructing a partial cloverleaf interchange. This could be accomplished by either widening the existing Clairemont Mesa Boulevard bridge or replacing the bridge.

State Highway Operation and Protection Plan and Program - The Department is required by legislation to develop a "Ten-Year State Highway Operation and Protection Plan". The Plan identifies rehabilitation needs, schedules for meeting those needs, strategies for cost control and program efficiencies.

Legislation also requires the development of a four-year State Highway and Operation and Protection Program (SHOPP). SHOPP projects are limited to capital improvements relative to maintenance, safety, and rehabilitation of state highways and bridges that do not add a new traffic lane to the system. The SHOPP reflects the first four years of the Ten-Year State Highway Operation and Protection Plan.

District 11 also develops a 2002 Ten-Year SHOPP Needs Plan. There are several projects on SR-163 as shown in Table 7.

State Highway Improvement Program (STIP)

The State Highway Improvement Program (STIP) is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the State Highway Account and other funding sources.

Each new STIP includes projects carried forward from the previous STIP plus new projects and reserves from among those proposed by regional agencies in their regional transportation improvement programs (RTIP). The STIP also includes projects from the Department's interregional transportation improvement program (ITIP).

There are currently no STIP projects in the SR-163 corridor.

Transit Component

The Metropolitan Transit Development Board's (MTDB) Short-Range Transit Plan (November 2000) identified transit and bus needs for their service area within the San Diego region. This plan has evolved into a two-year strategic planning process, called Transit Works, which culminated in the adoption of a Transit First strategy in October 2000.

The North County Transit District (NCTD) has also reevaluated how they will provide public transportation services to the region's residents. They have developed a strategic business plan called Fast Forward, which includes both near-term and long-term planning components.

MTDB, NCTD, and SANDAG subsequently worked together to develop a strategy in which

TABLE 7

TEN-YEAR SHOPP PROJECTS

Post Mile	Location	Description	Fiscal Year
0.0 - 3.0	I-5 to Sixth Ave.	Rehabilitate Fence	2003/04
0.5 - 1.2	6th Street Avenue Bridge and "A" Street to north of I-5/SR-163 interchange	Replace planting and upgrade irrigation	2007/08
1.2 - 2.2	I-5 to Washington	Construct median barrier	2003/04
0.8 - 3.8	0.2 miles north of I-5/SR-163 to 0.2 miles south of I-8/SR-163	Replace planting and upgrade irrigation	2011/12
1.4 - 8.8	Laurel Street overcrossing to Clairemont Mesa Boulevard overcrossing	Bridge rail upgrade and deck rehabilitation	2008/2009
2.4 - 6.0	Robinson Avenue to Genesee Avenue	Install northbound and southbound ramp meters (16 locations)	2009/10
3.2 - 11.1	6th Avenue to SR-163/I-15 separation	Upgrade signs (material and exit #s)	2007/08
4.1 - 6.7	Friars Road overcrossing to Mesa College Drive overcrossing	Upgrade irrigation	2008/09
7.1 - 9.0	SR-163/I-805 to Clairemont Mesa Blvd.	Replace planting and upgrade irrigation	2009/10
9.0	SR-163/Clairemont Mesa Blvd.	Replace bridges	2006/07
R10.8 - R10.9	Kearny Villa Road	Construct meter HOV bypass lane	2005
Various		Repair/replace culverts	2008/09

Transit First and Fast Forward would serve as the foundation for shaping the SANDAG Regional Transit Vision (RTV).

The RTV includes four types of transit service concepts: Yellow Car Service (Regional Express Services), Red Car Service (Corridor Express Services), Blue Car Service (Local Services), and Green Car Service (Circulator Services). These service concepts will all have connectivity with each other.

Yellow Car Service provides the fastest type of transit service based on longer-distanced regional tripmaking, especially during commute hours. To a large extent, these routes will travel on the freeway system, using High Occupancy Vehicle (HOV) or Managed Lanes and bypass facilities where required to avoid high traffic congestion.

Red Car Service provides rapid, relatively frequent transit services along the region's major travel corridors. The San Diego Trolley and some street-based express bus services approach this kind of service. This type of service will operate in the existing trolley or light rail corridors and trolley-like service will be expanded into other corridors. Initially, this expanded service will be operated with buses or flextrolleys either on existing or other exclusive rights-of-way.

Future Yellow and Red Car Services would utilize the proposed transitway through Kearny Mesa and and stop at major transfer centers along I-15 at the Stadium, El Cajon Blvd and SR-94.

Blue Car Service provides local service within communities and neighborhoods. This type of service will be operated with standard buses on major and collector streets. Priority treatment over automobiles will be provided at certain intersections and bottlenecks. Blue Car Service is proposed for SR-163 from Genesee Avenue to Fashion Valley, and from Washington Street to downtown San Diego.

It is anticipated that an express bus route coming down from the inland north county would utilize SR-163 until the Kearny Mesa Transitway and Stadium Direct Access Ramps are constructed.

Green Car Service provides for travel within communities by circulating through residential

areas and providing service to community centers and employment centers. At these centers, passengers could transfer to Yellow Car, Red Car, or Blue Car services. Green Car Service is not proposed for Route 163.

System Management and Travel Reduction Component

Programs/Studies--The SANDAG Traffic Signal Optimization Program (April 1994) program was developed to enhance inter-jurisdictional coordination, to provide detailed guidelines for the implementation of a countywide traffic management system, and to identify a conceptual plan for future implementation of Intelligent Vehicle Highway System (IVHS) technologies. The proposed signal system improvements are expected to significantly reduce vehicle emissions and traffic congestion.

SANDAG prepared the Transportation Control Measure (TCM) Plan for Air Quality for inclusion in the 1991 Regional Air Quality Strategy (RAQS). The TCM Plan includes traffic signal improvements, transit service expansion, vanpools, high occupancy vehicle lanes, park and ride lots, and bicycle facilities.

The Air Quality Strategy incorporated into the SANDAG 2030 RTP includes both the EPA-approved 1982 State Implementation Plan (SIP) transportation control measures and the more extensive program adopted under State law in the RAQS. Four strategies were included in the 1982 SIP: ridesharing, transit improvements, traffic flow improvements, and bicycle facilities and programs.

TCMs in the 1982 SIP have been fully implemented, but until they are formally removed from the SIP, SANDAG must continue to report on them in the conformity demonstrations required for federal approval of the RTP and the Regional Transportation Improvement Program (RTIP). TCMs continue to be funded, and the level of improvements anticipated in the 1982 SIP for the four transportation strategies has been surpassed.

Additional Traffic Monitoring Stations are proposed for particular locations on SR-163 between I-805 and I-15. These loop detectors will

be embedded in the pavement and will enhance the collection of real-time traffic information.

Transportation Management System (TMS)-- This is a collection of field elements with associated communications, central applications and the Transportation Management Center (TMC). The TMS Master Plan is a five-year plan for development of the TMS and includes internal and external roles, responsibilities, expected outcomes, performance measures, standardization, and a long-term financial plan. Information detailed in the TMS Master Plan will be contained in the Department's long range planning documents, including Transportation Concept Reports.

Arterial Streets--Another system management technique is the expansion of the existing and proposed arterial street network within the corridor. These arterial improvements are expected to substantially increase mobility and reduce peak period demands on the freeway. These enhancements can provide routes for short intraregional trips where existing arterials are inadequate or act as alternative routes for some regional trips. Capacity of existing arterials within the corridor are affected by roadway conditions, access conflicts, numerous traffic signals, and general traffic congestion. Realignment, widening, correcting roadway conditions, minimizing side friction, and improving the traffic flow of arterials can increase corridor capacity.

Ramp Meters--Additional TSM improvements are expected to optimize traffic flow on the existing transportation systems within the corridor. Ramp metering is a traffic management tool to regulate the flow of traffic entering freeways during peak traffic hours. Specifically, a future ramp meter will be installed on the Kearny Villa Road northbound onramp to SR-163.

Freeway congestion is most often caused by a bottleneck, where the freeway demand exceeds the freeway capacity. When the demand exceeds the capacity, congestion creates stop-and-go traffic. Ramp metering increases the capacity of mixed flow lanes and enables traffic to flow at greater speeds. The number of traffic accidents is reduced as well. On weekdays, the meters operate during the peak traffic periods. The ramp volume

as well as the volume on the freeway determines the rate at which cars are allowed onto the freeway. The mainline responsive controllers react to the volumes on the freeway. If the volumes decrease significantly, then the meter will adjust and allow more cars onto the freeway. If the freeway volume is very light, the meters may drop out of metering.

Transportation System Management (TSM) and Transportation Demand Management (TDM) - Additional system and demand management strategies that have the potential to reduce congestion include ridesharing, home or satellite workplace telecommuting, variable work hours, employee transportation allowances, and low-cost parking for carpools and vanpools.

Park and Ride- There are no Park and Ride facilities along SR-163.

Freeway Service Patrol (FSP)--The Freeway Service Patrol (FSP) program was designed to alleviate incident related traffic congestion by operating a tow service to aid stranded or disabled vehicles on urban freeways during the morning and afternoon commuter periods. The FSP commonly performs tasks such as changing a flat tire, jump-starting vehicles, providing gas, or towing disabled vehicles. Obstacles along the roadside can often cause a freeway operating at capacity to breakdown into stop-and-go traffic. In September 1992, the Freeway Service Patrol Act was enacted under Assembly Bill 3346. Currently, the FSP serves all segments of SR-163.

Call Boxes -As a complement to the FSP, most urban freeways and expressways that are a part of the State Highway System in San Diego County have a system of "call boxes". The system of call boxes is coordinated between the CHP and the Department. Calls are answered by the CHP dispatch operator and appropriate services are notified to provide assistance. Most call boxes are located on the right shoulder of the highway, with some located on transition, exit, and entrance ramps. Blue signs, which are marked with the route number and post mile information, designate the location of each solar powered call box.

Maintenance Component

Maintenance of the State highway system is an integral part of the transportation concept. Highway maintenance is defined as the preservation, upkeep and restoration of the roadway structures as nearly as possible in the condition in which they have been constructed. "Roadway structures" includes highways, toll bridges, and appurtenant facilities. Maintenance also includes the operation of highway facilities and services to provide satisfactory and safe highway transportation. Maintenance practices proper scheduling and planning of routine maintenance procedures to keep traffic delays at a minimum.

The Pavement Condition Survey (PCS) is an inventory of the existing pavement surface conditions for the entire State highway network. The survey is a continuous, 12-month process which establishes the severity and extent of surface distress.

There are several different types of surface distress that are discussed in the Department's Pavement Evaluation Manual (January, 2000).

Portions of SR-163 exhibit rigid distress faulting, which is a vertical displacement of abutting slabs at the transverse joint creating a "step" in the pavement. Parts of SR-163 also suffer from three types of moderate and high alligator cracking. Alligator 'A' cracking is characterized by a single, longitudinal crack in the wheel path. Alligator 'B' cracking displays interconnected or interlaced cracks in the wheel path, forming a series of small polygons. Alligator 'C' cracking has interconnected or interlaced cracks outside the wheel path.

Goods Movement Component

The passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 created additional emphasis being placed on the movement of goods in an integrated transportation network. It is essential to identify critical elements within major goods movement corridors in order to develop effective strategies for managing, maintaining and improving transportation system connectivity. Goods movement planning incorporates analysis of impacts on noise, air quality, land use, congestion,

safety, and can have a significant economic impact on our regional economy. The Transportation Equity Act for the 21st Century (TEA-21) builds on the initiatives established in ISTEA, authorizing highway, highway safety, transit and other surface transportation programs for the next six years.

Three segments of the route, between I-8 and I-15, have been designated by the Federal Highway Administration as part of the National Network, available to larger trucks, based on the Surface Transportation Assistance Act.

Aviation Component

Although the Aviation Component is not as critical to the 2020 Transportation Concept as the other modal options, ground access issues to and from airport facilities could have an impact on the State Highway System. In the SR-163 corridor, there are two airports and heliports of importance; they are the Marine Corps Air Station (MCAS) Miramar and Montgomery Field Airport. One other heliport, not described below, is in Kearny Mesa and is for private use only.

Marine Corps Air Station (MCAS) Miramar-- MCAS Miramar is a major military airport and heliport serving the Marine Corps in the San Diego region. In 1993, Congress approved a base closure and realignment plan, which replaced the naval operations at Miramar with Marine Corps fixed wing and helicopter air operations. Formerly known as Naval Air Station (NAS) Miramar, MCAS Miramar is home to ten rotary-winged squadrons and 11 fixed-winged squadrons. A majority of the operations will take place on the base. Previously, the Navy tended to have flight patterns directly over residential areas. A newer flight pattern has been developed to reduce the noise impact upon the local residents.

Montgomery Field Airport--Montgomery Field is a general aviation airport with heliport capabilities and is centrally located in Kearny Mesa. The airport is home base to approximately 600 aircraft and offers a 4,600 feet lighted runway served by an Instrument Landing System (ILS), a 3,400 feet parallel runway, a 3,400 feet crosswind runway, a control tower operating from 6:00am-9:00pm, and a full range of aviation support facilities.

Non-Motorized Component

Each segment of SR-163 is classified as freeway. Bicycle and pedestrian travel are prohibited on the route. California Vehicle Code 21200 states all roads in California, except those designated as freeways, are open to bicyclists unless there is a resolution passed to post them closed. Bicycle travel will continue to be accommodated on bike lanes and bike routes parallel to SR-163. Pedestrian travel will also continue to be accommodated on roads and paths parallel to SR-163.

There are numerous interchanges and crossings of SR-163, which provide non-motorized access across the state facility to a variety of city streets. Projects to provide improvement to the interchanges will maintain and improve non-motorized facilities and access, according to Caltrans Deputy Directive 64, Accommodating Non-Motorized Travel. Some of these interchange projects include the City of San Diego's at the SR-163/Friars Road interchange, the locally funded project to reconstruct the SR-163/Clairemont Mesa Boulevard interchange, and the project to add an HOV bypass lane for the northbound Kearny Villa Road ramp. There is a significant opportunity to provide better regional connectivity for bicycle and pedestrian traffic by including better non-motorized facilities across SR-163 on Friars Road.

Bicycle racks will continue to be provided on most MTS transit services. However, bicycles are not accommodated on certain express services (routes 810, 820, 850, and 860) which operate on SR-163.

Tourism Component

The California Department of Tourism estimates that recreational activities and the travel industry generate \$55.2 billion dollars per year and sustain 700,000 jobs statewide, which makes California first in the nation for visitors and earnings. California drew over 250 million person trips in 1998, of which San Diego received over 30 million person trips. Some of the most attractive places to see in San Diego are Sea World, Old Town, and Balboa Park, which is served by SR-163. The Gaslamp Quarter National Historic District in downtown San Diego and the Del Mar Fairground also have their fair share of visitors.

Along the SR-163 corridor there are additional recreational activities that have attracted visitors to the area, including the world famous San Diego Zoo. Three shopping centers, Hazard Center, Mission Valley Center and Fashion Valley Mall, all situated in Mission Valley, have a variety of stores and restaurants and are easily accessible from the freeway. All locations have heavily seasonal traffic congestion.

Air Quality Conditions

SR-163 is located in the San Diego Air Basin. Progress has been made in the San Diego Air Basin in attaining federal and state air quality standards. Federal and State standards have been met for lead, nitrogen dioxide, sulfur dioxide, and CO. The approximate western two-thirds of the San Diego Air Basin is federally designated as a maintenance area for CO. Federal standards are being met for inhalable particulates labeled as PM10. State standards for PM10 have not been met.

In October 2002, the EPA issued a finding that the San Diego area had attained the one-hour ozone National Ambient Air Quality Standards (NAAQS) by the applicable attainment deadline of November 15, 2001.

In December 2002, the San Diego Air Pollution Control District (SDAPCD) adopted the "Ozone Redesignation Request and Maintenance Plan for San Diego County". Also in December 2002, the

California Air Resources Board (CARB) submitted this Maintenance Plan to the EPA with a request that they approve the plan and redesignate San Diego to attainment for the one-hour ozone NAQQS.

The new federal eight-hour ozone standard was passed into law in 1997. The US EPA is required to designate eight-hour ozone nonattainment areas by April 15th, 2004. At the time of this writing, it does not appear as if the San Diego region will be able to attain the new eight-hour standard. Eight hour ozone SIPS will be due starting in 2007.

The new federal PM 2.5 standard was also enacted in 1997. The implementation schedule is expected to parallel that of the eight-hour ozone standard.

The Air Resources Board (ARB) is currently preparing the Carbon Monoxide (CO) Maintenance Plan update. Adoption is expected by Summer 2004.

Intelligent Transportation System (ITS)

New methodologies can assist in providing better management of future transportation systems. Advanced technology research is one tool that can be used to enhance management of the transportation system. Under ISTEA, the Intelligent Vehicle Highway System (IVHS) Program identified four transportation corridors in the nation to showcase coordinated intelligent transportation system elements. Congress established the ITS Corridors Program to: (1) provide multiyear funding for showcasing ITS applications and benefits, (2) establish national ITS test beds, (3) advance ITS strategic planning, (4) leverage federal aid and other funding sources, (5) expose the public to ITS potentials, and (6) evaluate ITS technologies.

ITS activities in the San Diego region includes innovative use of the existing solar powered freeway call box infrastructure, the development of a multifunctional/ multimodal TMC in Kearny Mesa, the provision of automated traffic operation information to fleet operators in the goods movement, transit, and hazardous material industries, and the development of an IVHS International Border Crossing Operations Strategic Plan. Additional IVHS technologies that can be utilized in the San Diego region include vehicle navigation systems, computerized roadway sensors, changeable message signs, television roadway monitoring devices, smart car sharing systems, and advanced highway maintenance and construction technology.

Another related new technology is the future provision of an Automated Highway Vehicle System (AHVS). ISTEA mandated development of an automated highway and a vehicle prototype from which future fully automated intelligent vehicle highway systems can be developed. The Department is a core member of The National Automated Highway System Consortium (NAHSC), which was formed to specify, develop, and demonstrate a prototype of a working AHVS in the United States by 2001. AHVS technology will consist of at least two major subsystems, including vehicles and infrastructure. AHVS will showcase features such as adaptive cruise control, object detection, collision warning and avoidance systems, longitudinal and lateral vehicle control, maneuver coordination, and navigation systems. The specifications will provide for evolutionary deployment that can be tailored to meet regional and local transportation needs. The consortium will seek opportunities for early introduction of vehicle and highway automation technologies to achieve early benefits for all surface transportation users. An AHS Proof-of-Technical Feasibility Demonstration occurred during August 1997 on the existing I-15 HOV lanes.

2020 Transportation Concept Facility Improvements

Table 8 lists the Transportation Concept facility improvements for SR-163.

Post-2020 Ultimate Transportation Corridor

The UTC describes the long-term (beyond the 20 year planning period) need for transportation facility improvements. The UTC for SR-163 is the same as the 2020 Transportation Concept. Additional transportation improvements to SR-163 may be considered in the future.

TABLE 8

2020 TRANSPORTATION CONCEPT FACILITY IMPROVEMENTS

Segment/County/ Post Mile	Location	Improvement Description	Peak Hour Operating LOS	Concept LOS*
2-3) SD 0.9-3.7	I-5 to I-8	Construct operational improvements	F0	F0
4) SD 4.4	Friars Rd/SR-163	Construct new southbound SR-163 off ramp and interchange improvements**	F0	F0
5) SD 9.1	Clairemont Mesa Boulevard/SR-163	Reconstruct interchange	E	F0
6) SD R10.8	Kearny Villa Road/ SR-163	Construct northbound HOV bypass lane on ramp	D	E

LOS = Level of Service

** City of San Diego project

*Concept LOS is based on the SANDAG CMP minimum LOS standard.

NOTE: Additional improvements that will affect the SR-163/I-5 junction are discussed in the Central I-5 Corridor Study.

ADT	Average Daily Traffic
AHVS	Automated Highway Vehicle System
APCD	Air Pollution Control District
CHP	California Highway Patrol
CMP	Congestion Management Program
DSMP	District System Management Plan
FHWA	Federal Highway Administration
HOV	High Occupancy Vehicle
IBTC	International Border Trade Corridors
ICES	Intermodal Corridors of Economic Significance
IRRS	Interregional Road System
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation Systems
IVHS	Intelligent Vehicle Highway System
LOS	Level of Service
MSL	Maintenance Service Level
MTDB	Metropolitan Transit Development Board
NCTD	North County Transit District
NHS	National Highway System
PM	Post Mile
PR	Project Report
PSR	Project Study Report
RTP	Regional Transportation Plan
RTV	Regional Transit Vision
R/W	Right of Way
SANDAG	San Diego Association of Governments
STAA	Surface Transportation Assistance Act
TCM	Transportation Control Measure
TCR	Transportation Concept Report
TDM	Transportation Demand Management
TMC	Transportation Management Center
TSDP	Transportation System Development Plan
TSM	Transportation System Management
UTC	Ultimate Transportation Corridor
V/C	Volume to Capacity

This page intentionally left blank.

I approve this Transportation Concept Report as the guide for
development of State Route 163 over the next 20 years.

SUBMITTED BY:

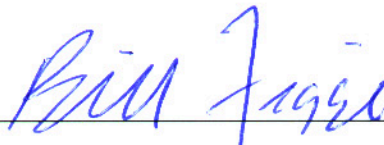


Kimberly Weinstein, Chief
System Planning Branch

1-23-04

Date

RECOMMENDED BY:



Bill Figge
Deputy District Director
Planning

1-23-04

Date

APPROVED BY:



Pedro Orso-Delgado
District Director

1/26/04

Date